

ENVIRONMENTAL IMPACT ASSESSMENT FOR  
THE SUBDIVISION, CLOSURE, AND REZONING  
OF PORTIONS; "A & B" OF ERF 1023 AND  
PORTION "C" OF ERF 3778 AND THE CREATION  
OF A STREET AT ERF3654, SWAKOPMUND

**ENVIRONMENTAL SCOPING REPORT**



**Prepared For**

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## DOCUMENT INFORMATION

<b>Project Name</b>	Subdivision, Closure, and Rezoning of portions; "A & B" of Erf 1023 and portion "C" of Erf 3778 and Creation of a street at Erf 3654, Swakopmund
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## LIST OF ACRONYMS

DEAF:	Directorate of Environmental Affairs and Forestry
EAP:	Environmental Assessment Policy
ECC:	environmental Clearance Certificate
EIA:	Environmental Impact Assessments
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
GP:	General Plan
I&APs:	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water, and land Reform
MEFT:	Ministry of Environment, Forestry and Tourism
MURD:	Ministry of Urban and Rural Development
NSA:	Namibia Statistic Agency
URPB:	Urban and Regional Planning Board

## EXECUTIVE SUMMARY

The Municipality of Swakopmund intends to carry out the subdivisions of Erf 1023 into Portions A, B and Remainder as a street and Subdivision of Erf 3778 into Portion C and Remainder as a street, Consolidate Portions B and C into Erf X and Rezoning of Erf X and Portion A from “Street” to “General Business. Additionally, apply for the subdivision of Erf 3654 into Portion A and Remainder as “Street”. The intended activities as mentioned above will be carried in order to rectify the discrepancies between the General Plan (GP) and the situation on the ground in line with the Swakopmund Town Planning Scheme and subjected to the approval of planning board, Urban and Regional Planning Board (URPB).

In terms of the Environmental Management Act (EMA) No. 7 of 2007 (Schedule 5.1) and its regulations (GN No. 30 of 2012), The intended activities (Rezoning and Creation of a public road) cannot be undertaken without an Environmental Impacts Assessment (EIA) being carried out and an Environmental Clearance Certificate (ECC) being obtained.

Green Gain Consultants cc has been appointed to conduct the required EIA study and apply for the ECC for the proposed activities. This study was carried out in line with the requirements of the Environment and Management Act (Act No. 07 of 2007) and its Regulations (GN No. 30 of February 2012). Given the scale of the project activities, a Scoping process was deemed sufficient. The process followed a multidisciplinary approach which include collection of baseline information both biophysical environment and socio-economic as well as consultation with potential Interested and Affected Parties (I&APs) and relevant stakeholders.

This Scoping report presents an assessment of potential environmental and socio-economic impacts. Also attached is an Environmental Management Plan (EMP) which detail a list of mitigation measures to avoid and minimize potential negative impacts and optimize the potential positive impacts. It also outlines roles and responsibilities of the proponent and other different role players.

# 1. INTRODUCTION AND BACKGROUND

## 1.1 BACKGROUND

There are currently discrepancies between the General Plan (GP) and the situation on the ground involving Erf 1023, Erf 3778 and Erf 3654, Swakopmund. Hence, the Municipality of Swakopmund intends to apply town planning procedures as follows.

- ✚ Subdivision of Erf 1023 into portions A, B and Remainder, permanent closure of portions “A and B” as “streets” and Rezoning of portions A and B from “street” to “general business”
  
- ✚ Subdivision of Erf 3778 into portion C and Remainder, permanent closure of portion C as a “street”, and Rezoning of portion C from “street” to “general business”
  
- ✚ Subdivision of Erf 3654 into portion A and Remainder for the creation of a street on the Remainder of Erf 3654.

The rectification of the existing discrepancies as listed above will ensure compliance with the Swakopmund Town Planning Scheme. In terms of the Schedule 5.1 (a) The Rezoning of land and Schedule 10.2 (a) the construction of a public road cannot be undertaken without an EIA being carried out and an ECC being obtained, hence this study.

## 1.2 SCOPE OF THE STUDY

The environmental scoping study was conducted in line with the Namibia’s Environmental Impact Assessment Regulations (GN No. 30 of 2012). It indicates a description of the affected environment and the way the proposed activities may affect the environment.

A multidisciplinary approach was used to collect baseline information. Information pertaining to the receiving environment and its social surroundings has been sourced through site investigations, Village Council documents and the use of Geographic Information Systems (GIS) mapping. The study also benefited a great deal from Interested and Affected Parties contributions.

### 1.3 PURPOSE OF THE STUDY

The aims of this Scoping process are.

- Evaluate the suitability of the proposed activities against the biophysical and socio-economic of the area.
- Propose the appropriate mitigation measures to avoid, mitigate or lessen the negative impacts.
- Consult all I&AP’s and relevant stakeholders.
- Above all, comply with the EMA, No. 07 of 2007.

### 1.4 Environmental Assessment Practitioner (EAP)

Green Gain Consultants cc is a Namibian based professional environmental and natural resources consulting firm established and driven through belief, passion, and dedication to sustainable development. Established in 2012, Green Gain has grown into a substantial team of environmental practitioner in Namibia providing innovative and cost-effective solutions to environmental challenges and help our clients meet regulatory and stakeholder expectations for environmental performances. The table below presents detailed information about Green Gain Consultants cc.

*Table 1: Details of the EAP*

Environmental Assessment Practitioner (EAP): Green Gain Consultants cc	
Physical address	Cnr. Joe Davis and Paul van Harte, Narraville, Walvis Bay
Postal address	P.O. Box 5303, Walvis Bay
Contact numbers	0813380114 or 0811422927
Email address	<a href="mailto:info@greengain.com.na">info@greengain.com.na</a>
Expertise	<p><b>Name:</b> Mr. J.K. Amushila</p> <p><b>Qualifications:</b> M. Sc. Environmental Management, B. Honors Agriculture, B. Degree Agriculture, National Diploma in Agriculture.</p> <p><b>Experience:</b> He is a registered EAPAN member (No.165) He has worked on several EIA and SEA projects. Through his consulting work he gained experience of not only EIA project management, but also environmental specialist experience as well as public consultations.</p>



## 2. APPROACH TO THE STUDY

Given the nature of the proposed activities, a Scoping study was deemed sufficient. The Scoping process include the followings.

- **Site visits to collect primary data.**
- **Legal and policy review**
- **Gleaning over existing information pertaining to similar developments and issues**
- **Discussions, meetings, and site visits with the Authority and in this case the proponent**
- **Incorporate opinions and concerns raised by interested and affected parties.**
- **Make professional judgment and recommendations.**

### 2.1 Baseline study

#### *a). Site Visits:*

Sites visit was conducted to collect biophysical data such as.

- Roads and traffic information
- Land use and adjacent areas
- Hydrological features
- Soil and Geology
- Topographic features, etc.

#### *b). Review of Policy and Relevant Documents/Literatures*

The following Literatures were reviewed.

- **Swakopmund Town Planning Scheme**
- **Local Authorities Act, (Act 23 of 1992)**
- **Urban and Regional Planning Act No. 5 of 2018**

### 2.2 Public participation process

The Environmental Assessment Regulations specifies that a Public Participation Process must be conducted as an integral part of the EIA study. This was adhered to, as potential I& AP and relevant stakeholders were invited to register and forward concerns / comments to the EAP to ensure an equitable and effective participation.

## 2.2.1 Notification of IAPs and Stakeholders

Potential interested and affected parties (I&APs) were notified through newspaper advertisements and public notices which provided brief information about the proposed project and the EIA process. Public notices were advertised twice in two local newspapers Namib Times for 08 & 14 April 2022 and the Confidante newspaper for 08 and 14 April 2022. Additionally, public notices were also displayed at the Municipal offices and at the project site.



Figure 1: Public notices

**PUBLIC NOTIFICATION AND INVITATION:  
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR  
THE SUBDIVISION, CLOSURE, REZONING AND STREET  
CREATION IN SWAKOPMUND, ERONGO REGION.**

Notice is hereby given to all potential Interested and Affected Parties (I&APs) that applications for Environmental Clearance Certificates will be submitted to the Environmental Commissioner in terms of the Environmental Management Act (Act No.07 of 2007) for the following activities.

- Subdivision of Erf 3654 into portion A and Remainder for the creation of a street on the Remainder of Erf 3654.
- Subdivision of Erf 1023 into portions A, B and Remainder, permanent closure of portions "A and B" as "streets" and Rezoning of portions A and B from "street" to "general business"
- Subdivision of Erf 3778 into portion C and Remainder, permanent closure of portion C as a "street", and Rezoning of portion C from "street" to "general business"

**Proponent:** Municipality of Swakopmund  
**EAP:** Green Gain Environmental Consultants cc

The intended activities cannot be undertaken without any EIA being undertaken. I&APs are hereby invited to register, request for Background Information Document (BID), and send their comments to [eia@greengain.com.na](mailto:eia@greengain.com.na) on or before **29 April 2022**.

The need for a public meeting will be communicated to all registered I&APs.

**F Green Gain Consultants**      **tion:** Cell: +264 81 142 2927  
Email: [info@greengain.com.na](mailto:info@greengain.com.na)



# 3. DESCRIPTION OF THE PROPOSED ACTIVITIES

## 3.1 Locality

Portion A and B of Erf 1023 are located along Theo Ben Gurirab Avenue, Portion C of Erf 3778 is located along Moses Garoeb Avenue while Erf 3654 is located at the Corner of Moses Garoeb Avenue and Dan Tjongarero Avenue.



Figure 2: Locality map

### 3.2 Existing situations

In terms of the GP, Erf 1023 and 3778 are zoned as Streets and are part of Theo Ben Gurirab Avenue and Moses Garoeb Avenue respectively whereas Erf 3654 is part of the adjacent General Business.

However, as it can be seen in Figure 2 above, the situation on the ground depicts that the portions, hereinafter referred to as Portion A/1023, B/1023 and Portion C/3778 does not form parts of the streets, whereas the portion, referred to as Portion A/3654 is part of the street (Dan Tjongarero Avenue). Hence, the intended activities are meant to rectify the existing discrepancies to normalize the situation on the ground.

#### a) Erf 103 and Erf 3778



Figure 3: Overview of Erf 103 & 3778

Erf 3456



Figure 4: Overview of Erf 3456

### 3.3 Proposed subdivisions



Figure 5: Proposed layout

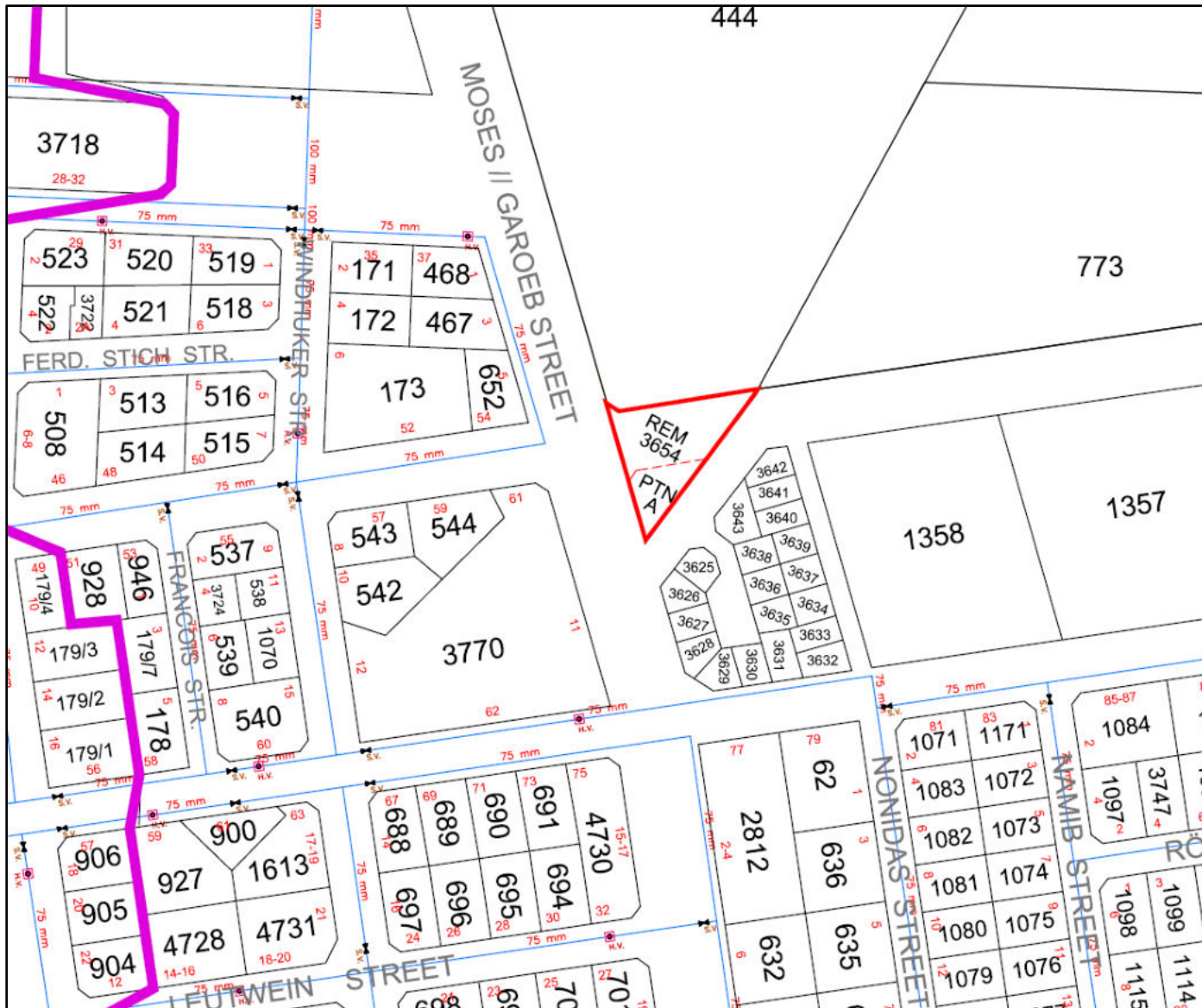


Figure 6: Proposed layout Erf 3654

### 3.4 Project alternatives

The EIA Regulations stipulates that the Scoping process should investigate alternative development options to any proposed developments/activities. The following alternatives were considered.

#### a). Do Nothing

The “Do-Nothing” option will imply that no action will be taken. This option will not be ideal because the intended activities are necessary to ensure compliance to rectify the existing discrepancies in line with the Swakopmund Town Planning Scheme.

#### b). Design and layout options

The proposed layouts as presented in Section above were all considered ideal and in accordance with the Townships and Division of Land Ordinance 11 of 1963 and the Swakopmund Town Planning Scheme, hence no alternative layouts are required.

### 3.3 Need and desirability

The “need” and “desirability” for the intended activities is based on the following aspects.

- There are currently discrepancies between the situation on the ground and the General Plan (GP). Hence, there is a need to subdivide all portions into individual erven in line with the Urban and Regional Planning Act, 05 of 2018
- The creation of public road networks is necessary to provide accessibility to the newly created erven.
- The proposed activities would not compromise the integrity of the town spatial development framework.
- The approval of this application would not compromise the integrity of the existing environmental management priorities for the area.



## 4. THE AFFECTED ENVIRONMENT

This section provides a brief description of the existing biophysical and built/social environments. It draws on information from site visits, the study team and member's experiences, background literature as well as maps and photographs. It also presents a background against which the positive and negative impacts of the proposed options can be assessed.

### 4.1 Socio-economic

#### a). About the town

Swakopmund is a town on the coast of western Namibia, 352 km west of the Namibian capital Windhoek via the B2 main road. The town has 44,725 inhabitants and covers 196 square kilometers of land. The town is situated in the Namib Desert and is the fourth largest population center in Namibia. Swakopmund is an important holiday destination and an example of German colonial architecture.



Figure 7: Overview of Swakopmund town

The town of Swakopmund is more of a tourist destination than a commercial town, with no fishing industry or local port. Many view the coastal towns such as Swakopmund and Henties Bay as holiday towns, which see an influx of tourists during the holidays. The National Marine Aquarium, Snake Park, the Rossmund Desert Golf Course, Swakopmund Museum, the crystal gallery, and the Jetty are some of the major tourist attraction sites in the town. As the tourism industry is expanding so are employment rates in the accommodation and catering industry.

#### **b). Service delivery**

Swakopmund is served with modern infrastructure and bulk services such as:

- **Water Supply:** Freshwater supply to the town is provided by NamWater.
- **Road network:** There is existing roadwork connecting to the proposed development areas. Most of the roads especially in the town's CBD are well-tarred except at some parts of suburbs like Mondesa and in the informal settlements of DRC. The C34 road will likely provide alternative access to the proposed townships of portions 182, 183, and 184.
- **Sewerage & Drainage:** The existing system serves most of the existing developed areas except for the DRC informal settlement. It is expected that the sewer reticulation network, pump stations will be provided and connected to the sewer treatment plant. The informal settlements are not connected to the sewer network; as such, some residents make use of septic tanks, pit latrines, etc.
- **Communication & Electricity:** Most of the town's electricity is served via Erongo RED, although some areas within the existing informal settlements are not connected. The town has access to various network coverage providers.
- **Economic development:** The town of Swakopmund is well developed and offers various services such as shopping centers, banking institutions, government offices, etc. It is served by the Swakopmund Airport and Railway Station. The main healthcare provider in the town is the Cottage Medi-Clinic, a hospital with 70 beds. There are about 66 schools in Swakopmund of which 49 are state-owned while 17 are privately owned. Institutions of high learning i.e., NUST and various training centers (CODEC) are readily available.

## 4.2 Biophysical settings

The weather along the coast differs from that of the interior parts of the country. This area receives little rain with low average temperatures. The mean annual rainfall for Swakopmund averages between 2 -25 mm, about half of which is expected from February to March. Surrounded by the Namib Desert on three sides and the cold Atlantic waters to the west, Swakopmund enjoys a mild desert climate.

The average temperature ranges between 15 C to 25 C. Rainfall is less than 20 mm per year, making gutters and drainpipes on buildings a rarity. The cold Benguela current supplies moisture for the area in the form of fog that can reach as deep as 140 km inland. The fog that originates offshore from the collision of the cold Benguela Current and warm air from the Hadley Cell create a fog belt that frequently envelops parts of the Namib Desert. Coastal regions can experience more than 180 days of thick fog a year. While this has proved a major hazard to ships, it is a vital source of moisture for desert life. The fauna and flora of the area have adapted to this phenomenon and now rely upon the fog as a source of moisture. The wind is predominately from the southwest with easterly winds occurring infrequently during the winter months. The residential areas are located south of the sand mining site and will not be affected during operational conditions.

The soil type of the site is Petric Gypsisols, which is gypsum-rich with the surface being covered with small stones and grit to larger rocks and boulders. The soils range from soft and un-compacted in areas where seasonal tributaries flow to being very compacted but have sufficient structure that is easily penetrated by burrowing animals. Accumulations of calcium sulfate are characteristics of gypsisols, which are restricted to the very dry areas of central Namib. The calcium sulfate is dissolved out of the rock and soil and then carried by percolating water beneath the surface, where it remains in a variety of forms: powder, pebbles, stone, or gypsum crystals. The crystals may also form a compact layer or crust just below the surface. Gypsisols generally have very low levels of fertility, so only the hardiest of plants will grow in them.

## 5. LEGAL REQUIREMENTS

The following is a brief overview of all pertinent Acts, bills, laws, policies, and standards regarding the environment which were considered while conducting the Scoping study for the intended activity.

Table 2: Applicable National Laws

LEGISLATION	PROVISION	PROJECT IMPLICATION
<b>Constitution of the Republic of Namibia (1990)</b>	The articles 91(c) and 95 (i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalizing policies to accomplish the sustainable objectives which include: - Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity.	The proposed development must be of sound environmental management objectives.
<b>Environmental Management Act No. 07 of 2007</b>	The purpose of this Act is to promote the sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment; to provide for a process of assessment and control of projects which may have significant effects on the environment; and to provide for incidental matters. The Act gives legislative effect to the Environmental Impact Assessment Policy. Moreover, the act also provides procedure for adequate public participation during the environmental assessment process for the interested and affected parties to voice and register their opinions and concern about the proposed project.	This has been complied with; thus, an EIA has been carried out and an ECC will be applied for prior to the creation of the proposed roads.
<b>Water Resources Management Act 2004</b>	The Water Resources Management Act (No 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of	The protection of ground and surface water resources should be a priority. Obligation not to pollute surface water bodies.

	sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.	
<b>Pollution Control and Waste Management Bill</b>	This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management. This Bill will license discharge into watercourses and emissions into the air.	All activities shall be conducted in an environmental sustainably manner.
<b>Labour Act (No 11 of 2007)</b>	135 (f): “the steps to be taken by the owners of premises used or intended for use as factories or places where machinery is used, or by occupiers of such premises or by users of machinery in connection with the structure of such buildings of otherwise in order to prevent or extinguish fires, and to ensure the safety in the event of fire, of persons in such building;” (Ministry of Labour and Employment Creation)	Contractors, Sub-contractor shall be guided by this Act when recruiting or handling employment related issues.
<b>Noise Control Regulations (Labour Act)</b>	It is essential to ensure that before any development project is approved and undertaken, an assessment or evaluation of expected noise level is done.	Noise generation during construction/development should be minimized to the satisfactory of neighboring residents and the town Council.
<b>Town and Regional Planners Act, 1996 (Act No. 9 of 1996)</b>	This Act establishes the Namibian Council for Town and Regional Planners, defines functions, and powers of the Council and provides for the registration of town and regional planners and the supervision over their conduct. The Minister may, on recommendation of the Council prescribe the kinds of work of a town and regional planning nature which shall be reserved for town and regional planners. The Act also defines improper conduct and defines disciplinary powers of the Council. Furthermore, the Act provides for the establishment of national, regional, and urban structure plans, and the development of zoning schemes. It also deals with a variety of related land use control issues such as	A registered Town Planner has been appointed for this project.

	the subdivision and consolidation of land and the establishment and extension of urban areas.	
<b>Town Planning Ordinance (No. 18 of 1954)</b>	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	Town Planning Procedures will be registered through the URPB
<b>Urban and Regional Planning Act No. 5 of 2018</b>	The Act and Regulations combine the Townships Board and Namibia Planning Advisory Board (NAMPAB) into one to be known as the Urban and Regional Planning Board and delegate the decisions on town planning applications to Local Authorities. However, an LA can only make decisions after the MURD has declared a Local Authority as an Authorised Planning Authority (APA).	Town Planning Procedures will be applied for the proposed subdivision and rezoning  Since Municipality of Swakopmund is not yet an approved APA, approval should be obtained from the Urban and Regional Planning Board (URPB)
<b>Land Survey Act 33 of 1993</b>	To regulate the survey of land; and to provide for matters incidental thereto.	Surveying procedures must be applied accordingly
<b>Local Authorities Act (No. 23 of 1992)</b>	The purpose of the Local Authorities Act is to provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties, and functions of local authority councils; and to provide for incidental matters.	The proponent is a Local Authority. The need and desirability for the proposed subdivision has been approved.
<b>Soil Conservation Act 76 of 1969</b>	The Soil Conservation Act stipulates that the combating and preventing of soil erosion should take place; the soil should also be conserved, protected, and improved, vegetation and water sources and resources should also be preserved and maintained. When proper mitigation measures are followed along the construction and implementation phase of the project, the natural characteristic of the property is expected to have a moderate to low impact on the environment.	This should be complied with during the construction phase as outlined in the EMP for this project.

## 6. ASSESSMENT OF PROJECT IMPACTS

The scoping process has identified potential project impacts during its planning and operation phase and examined each of these issues. In assessing the impact of the proposed development, four rating scales were considered. Each issue identified was evaluated in terms of the most important parameter applicable to environmental management. These include the *extent, intensity, probability, and significance* of the possible impact on the environment. The rating scales used are as follows.

**Table 3: Significance assessment**

CRITERIA	DESCRIPTION			
EXTENT	<b>National (4)</b> The whole country	<b>Regional (3)</b> Erongo region and neighbouring regions	<b>Local (2)</b> Within a radius of 2 km of the proposed site	<b>Site (1)</b> Within the proposed site
DURATION	<b>Permanent (4)</b> Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient	<b>Long-term (3)</b> The impact will continue/last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter.	<b>Medium-term (2)</b> The impact will last for the period of the construction phase, where after it will be entirely negated	<b>Short-term (1)</b> The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
INTENSITY	<b>Very High (4)</b> Natural, cultural, and social functions and processes are altered to extent that they permanently cease	<b>High (3)</b> Natural, cultural, and social functions and processes are altered to extent that they temporarily cease	<b>Moderate (2)</b> Affected environment is altered, but natural, cultural, and social functions and processes continue albeit in a modified way	<b>Low (1)</b> Impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected
PROBABILITY	<b>Definite (4)</b> Impact will certainly occur	<b>Highly Probable (3)</b> Most likely that the impact will occur	<b>Possible (2)</b> The impact may occur	<b>Improbable (1)</b> Likelihood of the impact materialising is very low
SIGNIFICANCE	Is determined through a synthesis of impact characteristics. Significance is also an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.			

**Table 4: Color coding meaning**

<b>Low impact</b>	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction, or operating procedure.
<b>Medium impact</b>	Mitigation is possible with additional design and construction inputs.
<b>High impact</b>	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
<b>Very high impact</b>	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a “very high impact” is likely to be a fatal flaw.
<b>Status</b>	Denotes the perceived effect of the impact on the affected area.
<b>Positive (+)</b>	Beneficial impact
<b>Negative (-)</b>	Deleterious or adverse impact.
<b>Neutral (/)</b>	Impact is neither beneficial nor adverse
It is important to note that the status of an impact is assigned based on the status quo – i.e., should the project not proceed. Therefore, not all negative impacts are equally significant.	



## 7. ANTICIPATED PROJECT IMPACTS AND MITIGATION MEASURES

### 7.1 Potential Impacts: Planning and Construction Phase

The proposed subdivisions and rezoning are meant to normalize the existing situation; hence no actual construction work will be carried out. Thus, in this case there are no potential impacts of the construction phase in this regard.

### 7.2 Potential Impacts: Operation phase

Table 5: Potential impacts during operation phase:

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
<b>1. BIOPHYSICAL</b>							
Impact biodiversity (positive)	<ul style="list-style-type: none"> <li>No impact</li> </ul>					Low	The situation already exists
Visual impacts (positive)	<ul style="list-style-type: none"> <li>The road will improve aesthetic view.</li> </ul>					Low	The situation already exists
Impact on the soil	<ul style="list-style-type: none"> <li>Contamination of soil with chemicals (sodium chloride, Calcium magnesium acetate, etc.) which found in deicer agents.</li> </ul>					Low	<ul style="list-style-type: none"> <li>Use environmentally friendly materials and chemicals for road markings etc.</li> </ul>

Water usage and contamination	<ul style="list-style-type: none"> <li>Stormwater and surface contamination during road maintenance.</li> </ul>	1	1	2	2	Moderate	<ul style="list-style-type: none"> <li>Only use environmentally friendly materials and detergents.</li> </ul>
Erosion and surface runoff	<ul style="list-style-type: none"> <li>Due to increase hard surface, the surface will become impermeable, thus increasing the surface runoff.</li> </ul>	1	1	1	2	Moderate	<ul style="list-style-type: none"> <li>Make provision for stormwater drainage.</li> </ul>
Traffic impacts (positive)	<ul style="list-style-type: none"> <li>New road will allow traffic free flow and accessibility.</li> </ul>						<ul style="list-style-type: none"> <li>There already traffic regulatory signs at the existing intersections.</li> </ul>

## 8. CONCLUSION AND RECOMMENDATIONS

The objective of the Scoping Phase was to define the range of the impact assessment and determine the need to conduct any specialist study. It is believed that these objectives have been achieved and adequately documented in the Scoping Report. All possible environment aspects have been adequately assessed and necessary control measures have been formulated to meet statutory requirements thus implementing this project will not have any appreciable negative impacts.

### 8.1 Assumptions and Conclusions:

- All proposed road networks will not compromise the environmental integrity of the surrounding environment.
- There are no objections or critical issues to the proposed activities.
- The findings of the Scoping Assessment are considered sufficient, and no additional specialist study is required.

It is therefore recommended that the Environmental Commissioner do consider the findings and recommendations of this Scoping process with mitigation measures as outlined herein and in the Environmental Management Plan and subsequently, consider issuing an Environmental Clearance Certificate to authorize for the **following activities**

- **Subdivision of Erf 1023 into portions A, B and Remainder, permanent closure of portions “A and B” as “streets” and Rezoning of portions A and B from “street” to “general business”**
- **Subdivision of Erf 3778 into portion C and Remainder, permanent closure of portion C as a “street”, and Rezoning of portion C from “street” to “general business”**
- **Subdivision of Erf 3654 into portion A and Remainder for the creation of a street on the Remainder of Erf 3654.**

## 9. REFERENCES

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- Mendelsohn, J., Jarvis, A., Roberts, C., & Robertson, T. 2002. Atlas of Namibia. New Africa Books (Pty) Ltd: Cape Town.
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- Ruppel O.C. & Ruppel-Schlichting K. 2013, Environmental Law and Policy in Namibia. OrumbondePress.na & Welwitschia Verlag Dr. A. Eckl, Essen, Windhoek, Namibia.

## 10. APPENDICES

- APPENDIX A: List of I&APs
- APPENDIX B: Proof of Consultations
- APPENDIX C: EMP